

APPENDIX 9. ENHANCED REPAIR STATION AND AIR CARRIER OUTSOURCING OVERSIGHT SYSTEM

The purpose of this paper is to document the System Design Plan as stated by the Federal Aviation Administration's (FAA) Office of the Inspector General (OIG)/(ACURS) workgroup. This plan details each step of the process, to include phase completion dates.

This document consists of four sections. The first section lists the major steps in the product development process. The second section clarifies program objectives and limitations. The third section lists the program deliverables and the last section is a directory of workgroup participants.

FIGURE 1. SYSTEM DESIGN PLAN–Continued

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SECTION 1. SYSTEM DESIGN PLAN

This section describes the steps necessary to ensure successful completion of the Enhanced Repair Station and Air Carrier Outsourcing Oversight System.

It should be noted that tools for this program are being developed in two phases, including the repair station assessment tool (RSAT), outsource oversight prioritization tool (OPT), and risk management process (RMP). The first phase tools will be available for fielding at the beginning of fiscal year (FY)06, and Phase Two tools will be available for fielding at the beginning of FY07. Phase One tools are simplified paper versions of the tools. These tools still allow for repair station and air carrier outsourcing assessment and prioritization but at the local level. The Phase Two tool will be more comprehensive, be automated during FY06 and ready for fielding in FY07. Phase Two tools will allow for data sharing at a regional and national level.

1. DEFINE GOALS.

2. CONCEPTUAL DESIGN.

3. DETAILED DESIGN.

4. SYSTEM REQUIREMENTS.

A. Regulations Reviewed for Developing Policy: Title 14 of the Code of Federal Regulations (14 CFR).

- (1) Part 43.
- (2) Part 65.
- (3) Part 121.
- (4) Part 125.
- (5) Part 129.
- (6) Part 135.
- (7) Part 145.

B. Policy Review/Development/Revision: Order 8300.10, Airworthiness Inspector's Handbook.

- (1) Volume 2, chapter 64.
- (2) Volume 2, chapter 69.
- (3) Volume 2, chapter 161.
- (4) Volume 3, chapter 8.
- (5) Volume 3, chapter 97.
- (6) Volume 3, chapter 98.
- (7) Volume 3, chapter 133.
- (8) Volume 3, chapter TBD-Repair Station Outsourcing (PTRS 3663/5663).

FIGURE 1. SYSTEM DESIGN PLAN—Continued

(9) Volume 3, chapter TBD-Repair Station Evaluation Program-Team Approach (PTRS 3614/5614 and 3615/5615).

(10) Volume 3, CASS.

(11) Advisory Circular (AC) 108-1.

(12) AC 145-5.

(13) AC 145-9.

(14) New PTRS Activity Codes.

(15) Review—How to obtain information regarding outsource maintenance. This can be accomplished by including the number of work orders sent to each repair station and outsource maintenance costs as a percent of the total maintenance costs.

C. Procedures.

(1) FSAS/PTRS Program—Phase One (HBAW).

(2) RSAT—Phase One (8300.10).

(3) RMP—Phase One (8300.10).

(4) OPT—Phase One (8300.10).

(5) Repair Station Evaluation Program-Team approach.

D. Automation Requirements.

(1) FSAS/PTRS—Phase One and Phase Two.

(2) Repair station data package (SPAS)—Phase Two.

(3) RSAT—Phase Two.

(4) RMP—Phase Two.

(5) OPT—Phase Two.

(6) Repair station evaluation program-team approach—Phase Two.

E. Documentation Requirements.

(1) Work instructions for Phase One (8300.10).

(2) Work instructions for Phase Two (PPM).

F. Training Requirements.

(1) Phase One.

(2) Phase Two.

FIGURE 1. SYSTEM DESIGN PLAN—Continued

G. Resource Requirements.

- (1) Phase One.
- (2) Phase Two.

H. Data Support Requirements.

- (1) FSAS.
- (2) SPAS.
- (3) OASIS.
- (4) ATOS.

I. Interface.

- (1) Phase One.
 - (a) AFS-30 System Approach for Safety Oversight (SASO).
 - (b) AFS-300.
 - (c) AFS-600.
 - (d) AFS-900.
 - i. SPAS.

ii. Modify Safety Attribute Inspection (SAI) and Element Performance Inspections (EPI) to reflect new policies.

- (e) AVS-11.
 - (f) Field.
 - (g) NE05.
 - (h) Regions.
- (2) Phase Two.
 - (a) AFS-30 SASO.
 - (b) AFS-300.
 - (c) AFS-500.
 - (d) AFS-600.
 - (e) AFS-900.
 - i. SPAS.

FIGURE 1. SYSTEM DESIGN PLAN—Continued

- ii.* Modify SAI and EPI to reflect new policies.
- (f)* AVS-11.
- (g)* Field.
- (h)* NE05.
- (i)* Regions.

5. PROCESS, POLICY, AND RULES DEVELOPMENT.**6. PROCESS TESTING AND VALIDATION.***A. Items Required to be Completed to Begin Testing.*

- (1)* Draft Policies.
- (2)* New Program Tracking and Reporting Subsystem (PTRS) Codes.
- (3)* FSAS Automation or draft guidelines.
- (4)* Draft paper version of RSAT.
- (5)* Draft paper version of RMP.
- (6)* Draft paper version of the OPT.
- (7)* Test protocol including assessment forms and test locations.

B. Output of Testing.

- Results from tests.

7. MODIFICATION (IF NECESSARY).**8. IMPLEMENTATION OF PHASE ONE-BEGIN 10/1/05.***A. Items Required to be Completed to Begin Implementation.*

- (1)* Policies.
- (2)* New PTRS Codes.
- (3)* FSAS Automation or draft guidelines.
- (4)* Work instructions.
- (5)* Paper version of RSAT, RMP, and OPT.
- (6)* SPAS Repair Station Profile (currently available).

B. Implementation Plan to Include Training.

FIGURE 1. SYSTEM DESIGN PLAN—Continued

- 9. PHASE ONE COMPLETE-BEGINNING OF FY06.**
- 10. PHASE TWO BEGINS-10/1/05.**
- 11. AUTOMATION AND TRAINING REQUIREMENT FOR PHASE TWO.**
- 12. FEEDBACK ON PHASE ONE.**
- 13. AUTOMATION AND TRAINING DEVELOPMENT-FY06.**
- 14. AUTOMATION TESTING-FY06.**
- 15. AUTOMATION VALIDATION-TBD.**
- 16. AUTOMATION MODIFICATION (IF NECESSARY)-TBD.**
- 17. BEGIN TRAINING-TBD.**
- 18. PROCESS IMPLEMENTATION-TBD.**
- 19. PHASE TWO COMPLETED-TBD.**
- 20. FUTURE ENHANCEMENT.**
- 21. SYSTEM PROCESS REVIEW.**

FIGURE 1. SYSTEM DESIGN PLAN—Continued**SECTION 2. PROGRAMMATICS**

This section clarifies the goals and limitations of the proposed program as stated below.

1. WHAT IS IT/WHAT DOES IT DO?

A. Assists in targeting resources for both repair station and air carrier maintenance outsourcing certificate oversight.

B. Closed loop (includes validation).

C. Risk-based surveillance.

D. To be used by all 14 CFR parts 121, 135 (10 or more), and 145 principal inspectors (PI).

E. Mapped to system safety model.

F. Provides added value to ASI.

G. Based on current data source and ASI experience.

2. WHAT IT IS NOT.

A. Surveillance check list.

B. Data analysis system.

3. BUSINESS RULES.

A. Accessible to Flight Standards Service (AFS) personnel.

B. Available through SPAS.

C. Data package to be available in SPAS and data evaluation to be completed by inspector prior to completing the RSAT and OPT using data package available in SPAS or the repair station profile available in SPAS in Phase One.

D. Complete RSAT for each repair station once a year. Complete more if necessary and tailor to needs.

E. Cannot close 3650/5650 until all element surveillance is complete.

F. 3650/5650 automatically generates at least one PTRS for each element.

G. RSAT automatically generates RMP when requested by PI (Phase Two).

H. RMP should be accessible at anytime (enables tracking/documentation of issues).

4. LIMITATIONS.

A. Currently, the data available to the FAA regarding repair stations is very limited, in-terms of both quality and quantity.

B. The process does not possess analysis capabilities; hence, it is left to the ASI to perform a comprehensive assessment of data available.

FIGURE 1. SYSTEM DESIGN PLAN—Continued

C. The RSAT is a completely subjective tool as are most other risk assessment tools.

D. Automation will not be available until FY07, however, paper versions of the tools will enable for both repair station assessments and outsource prioritization to be completed at a local level. Phase Two automation will allow for data sharing at a regional and national level.

FIGURE 1. SYSTEM DESIGN PLAN—Continued**SECTION 3. DELIVERABLES****1. THIS WORKGROUP WILL DELIVER THE FOLLOWING ITEMS BY SEPTEMBER 30, 2005:**

- A. System Safety Based Repair Station and Air Carrier Outsourcing Oversight Process.*
- B. Process Validation—Tabletop Testing of the Process.*
- C. Process Documentation—Work Instructions.*
- D. Policies and Guidance.*
- E. System Requirements to Include Automation and Training for Phase Two.*

2. PAPER VERSION. A paper version of this process, to be used by the field, will be delivered by October 1, 2005. It should be noted that this version will possess a simplified version of the Repair Station Assessment Tool (RSAT), Outsource Oversight Prioritization Tool (OPT), and Risk Management Process (RMP). These tools will enable the FAA to assess repair station and air carrier outsourcing at a local level.

3. PROPOSED DEADLINE. According to discussion with AFS-1 on March 30, 2005, the proposed system will be automated during FY06 and will be ready for fielding in FY07. This system will be capable of sharing maintenance oversight data at a regional or national level.

FIGURE 1. SYSTEM DESIGN PLAN—Continued

SECTION 4. GROUP MEMBERS

The current members of this workgroup include the following:

Member	Organization
Bachelder, Dan	AWA (AFS-340)
Bailey, Martin	AWA (AFS-900)
Bean, George	AWP (Scottsdale FSDO)
Butler, Joseph	ANE (Windsor Locks FSDO)
Catron, DeBora	ASO (Memphis FSDO)
Gillissen, Neil	AEA (AEA-230)
Graham, Terry	ASW (SIMA CMO)
Henry, William	AWA (AFS-300)
High, Terry	ASW (SIMA CMO/Pass Representative)
Kim, Jung	AWA (AFS-900)
LaShells, Marci	AWA (AFS-310)
Pritchard, Jeff	ANM (ASAA CMO)
Schlossberg, Joel	AWA (AFS-330)
Younossi, Amer	AWA (AFS-900)

FIGURE 2. PROGRAM OVERVIEW

The purpose of this document is to provide an overview of the enhanced Flight Standards maintenance oversight programs. This includes both repair station and air carrier outsourcing oversight systems. These recommendations are prepared by the FAA's OIG/ACURS workgroup.

This document consists of two sections. The first section provides a high level discussion of system safety concepts. The second section describes the proposed oversight system. Further information on the development plan is available in Figure 1, System Design Plan. Detailed work instructions for the tools are available in Figure 3, Outsource Oversight Prioritization Work Instructions; Figure 4, Risk Management Program Work Instructions; and Figure 5, Repair Station Assessment Tool Work Instructions.

FIGURE 2. PROGRAM OVERVIEW—Continued

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FIGURE 2. PROGRAM OVERVIEW—Continued**SECTION 1. SYSTEM SAFETY**

A systems approach provides a logical structure for problem solving which views the entire system as an integrated whole. Consequently, to ensure such a system is as safe as possible, risks must be assessed and managed in all components of this system. Civil aviation is such a system. Accordingly, it should be recognized that in such a complex and dynamic system, all threats to safety cannot be avoided and predicted; hence prevention cannot be relied on alone. It must also be recognized that system designs do not completely preclude high consequences for every threat, hence, design features alone cannot be relied on. To achieve a high level of confidence, safety must be designed into and hazards eliminated or minimized.

1. BASIC CONCEPTS OF SYSTEM SAFETY.

- A.* Safety should be built into the system, not added on to a completed design.
- B.* Safety is a property of the system, not a component.
- C.* Accidents are not always caused by failures and all failures do not cause accidents.
- D.* Analysis to prevent the accident is emphasized instead of reacting to the accident.
- E.* Emphasis is on identifying hazards as early as possible and then designing to eliminate or control those hazards.
- F.* Trade-offs and compromises are recognized in system design.

2. KEY CONCEPTS. This workgroup has considered these system safety concepts and incorporated key concepts into the proposed oversight system.

FIGURE 2. PROGRAM OVERVIEW—Continued

SECTION 2. RISK BASED SURVEILLANCE

This workgroup was tasked to develop a standardized oversight system for repair station and air carrier outsourcing surveillance. As such, the workgroup recommended a risk based oversight system that allows for continuous assessment of each repair station and prioritization among repair stations, targeting Flight Standards' resources for use in the areas of highest risk. Additionally, certificate management can use a corresponding risk management process (RMP) for issues of concern. This system is for use by Flight Standards personnel involved in the certificate management of 14 CFR part 145 repair stations, including air carrier maintenance outsourcing.

1. ENHANCED MAINTENANCE OVERSIGHT WILL BE ACCOMPLISHED USING THE FOLLOWING COMPONENTS:

A. Risk Based Oversight System for Repair Stations (detailed in paragraph 2 below).

(1) An enhanced baseline surveillance program for repair stations whereby the current PTRS 3650/5650 is divided into elements to better define the intent of the guidance and provide for more comprehensive surveillance.

(2) A repair station assessment tool (RSAT) will provide an overall assessment of the repair station, identify potential risk areas, and update surveillance program.

(3) An RMP will be initiated for issues of high concern.

(4) An enhanced data recordation system to improve data reliability.

B. Enhanced tools for evaluation of air carrier maintenance outsourcing including an outsource oversight prioritization tool (OPT). (Detailed in paragraph 9 below.)

C. The following section discusses each of these topics in further detail.

2. RISK BASED OVERSIGHT SYSTEM FOR REPAIR STATIONS.

A. This system safety based approach identifies specific procedures that enhance the oversight of repair stations. The system is comprised of a baseline surveillance program, a repair station data package, a repair station assessment tool, and a risk management tool.

B. The overall oversight process involves the following steps:

(1) A comprehensive Baseline Repair Station Surveillance Program.

(2) A data package generated via Safety Performance Analysis System (SPAS) using current sources. This data is reviewed by the principal inspectors (PI) prior to completing the RSAT.

(3) An RSAT is completed taking into consideration steps (1) and (2), expertise of PI, and system design, which includes operating environment, configuration and design of repair station.

(4) The surveillance program is modified to reflect the risk level in each element.

(5) The completed RSAT enables an assessment of the repair station.

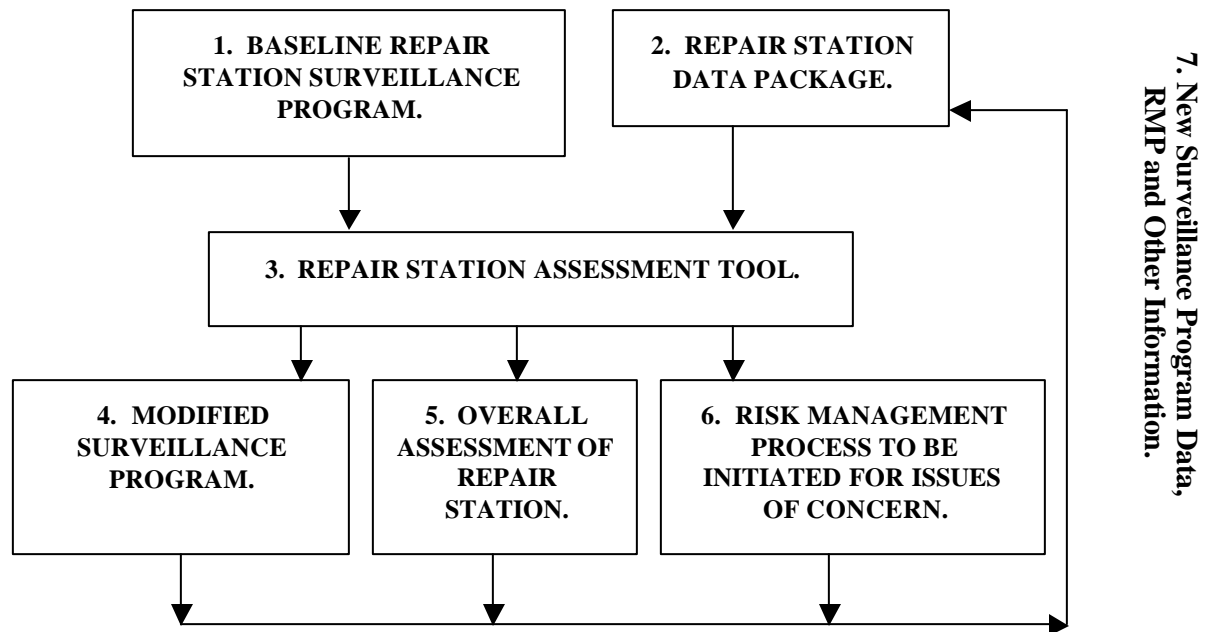
(6) An RMP is to be used for issues of high concern.

(7) During the next 12 months, the updated surveillance program and RMPs are completed and this data is fed back into the system.

FIGURE 2. PROGRAM OVERVIEW—Continued

(8) At the beginning of the fiscal year (FY), the process is repeated beginning with step (1) to obtain an overall assessment of the operator and plan surveillance for upcoming year, enabling the FAA to target resources to areas of highest risk.

C. The Repair Station Oversight System flowchart (Figure 1) depicts the above process and the next subsections provide further detail for steps (1) through (6).

**FIGURE 1. REPAIR STATION OVERSIGHT SYSTEM****3. BASELINE REPAIR STATION SURVEILLANCE PROGRAM.**

A. The Baseline Surveillance Program is designed to ensure that all aspects of 14 CFR 145 Repair Station operations are considered. The new surveillance program divides the current PTRS activity codes 3650/5650 into 14 elements, each assigned with a new 36XX/56XX activity codes. This partition better defines the intent of the FAA guidance and provides a more comprehensive surveillance structure.

B. The baseline surveillance program is accomplished by the PTRS activity code 3650/5650 triggering the 14 required activity codes listed below, which constitutes a complete facility inspection. All applicable triggered activity codes must be completed and closed before the 3650/5650 records are closed. Table 1 (next page) shows all the 14 elements, including Order 8300.10 chapters that address each element and the corresponding PTRS activity code.

4. REPAIR STATION DATA PACKAGE.

A. *SPAS*. This data package provides an analytical review of a repair station. This report contains data available through FAA information resources including, but not limited to, surveillance and enforcement data. Inspectors will use this data package in conjunction with their knowledge of the repair station; system design which includes operating environment, configuration and design of repair station; and personal expertise to complete the RSAT.

B. This data package will be available for fielding at the beginning of FY07. Meanwhile, inspectors should use the Repair Station Profile currently available in SPAS and any other source including data available through the certificate holder. It should be noted that currently the data available to the FAA regarding repair stations is limited.

FIGURE 2. PROGRAM OVERVIEW—Continued

TABLE 1. 14 ELEMENTS WHICH CONSTITUTE A COMPLETE FACILITY INSPECTION

Volume 3, Chapter 82 (3604/5604) Certificate Requirements	Volume 3, Chapter 90 (3659/5659) Personnel Record
Volume 3, Chapter 83 (3605/5605) Records Systems	Volume 3, Chapter 92 Training (3661/5661) Training
Volume 3, Chapter 84 (3660/5660) Manuals	Volume 3, Chapter 93 (3654/5654) Maintenance Process
Volume 3, Chapter 85 (3657/5657) Housing and Facilities	Volume 3, Chapter 94 (3606/5606) Work Away from Station
Volume 3, Chapter 87 (3656/5656) Technical Data	Volume 3, Chapter 88 (3608/5608) Quality Control
Volume 3, Chapter 86 (3658/5658) Tools and Equipment	Volume 3, Chapter 95 (3663/5663) Contract Maintenance
Volume 3, Chapter 89 (3601/5601) Parts and Materials	Volume 3, Chapter 96 (3618/5618) Air Carrier & Air Operator Requirements

NOTE: Order 8300.10, volume 3, chapters 97 and 98 have been modified to reflect these changes.

5. REPAIR STATION ASSESSMENT TOOL.

A. The RSAT is used for both surveillance planning and evaluation assessment. This tool will assist the PI, other assigned inspectors, supervisors, and managers in identifying areas of concern or criticality about a specific repair station. As a result of this assessment, the PI may modify the Baseline Surveillance Program, begin an RMP for issues of concern, or both. Additionally, the RSAT will provide an overall assessment of the repair station, which can be used for prioritization among repair stations. The RSAT is discussed in detail in the Repair Station Assessment Tool Work Instructions document. The work instructions for this tool will reside in Order 8300.10.

B. The RSAT is intended to be developed in two phases. Phase One will be available for fielding at the beginning of FY06; and Phase Two will be available for fielding at the beginning of FY07. The Phase One tool will be a simplified paper version of the tool, which will allow for repair station assessment and prioritization among repair stations at the local level. The Phase Two tool will be more comprehensive and will be automated during FY06 and will be ready for fielding in FY07. Phase Two tools will allow for data sharing at a regional and national level.

6. MODIFIED SURVEILLANCE PROGRAM.

A. As mentioned previously, the baseline surveillance program consists of one required PTRS activity code 3650/5650 for each repair station. This in-turn will generate 14 additional “R” items as listed in paragraph 3. The 3650/5650 can’t be closed until all these elements are completed and closed.

B. After completing the RSAT, the PI may modify the baseline surveillance program to reflect the risks. In such case, the PI may modify the upcoming fiscal year surveillance plan by assigning additional “P” items as necessary. It should be noted that each repair station must complete at least one “R” item for each element annually.

7. OVERALL ASSESSMENT OF REPAIR STATION. After completing the element assessments in the RSAT, the PI provides an overall assessment of the repair station. This overall assessment will allow for prioritization among repair stations.

8. RISK MANAGEMENT PROCESS. After completing the RSAT, the PI may use the RMP for areas of high concern. This process is designed to provide certificate management personnel an effective means to oversee the certificate holder’s management of identified hazards and the risk posed by those hazards. The RMP has six major steps, as illustrated in the Risk Management Process flowchart (Figure 2) and briefly described below.

FIGURE 2. PROGRAM OVERVIEW—Continued

A. Step 1. Hazard Identification. The purpose of hazard identification is to describe, “What’s wrong,” with the certificate holder’s operation. To complete the hazard identification step, the PI describes the conditions or circumstances in the certificate holder’s operating environment or in its operating systems that could lead to an unplanned or undesired event.

B. Step 2. Risk Analysis. The purpose of risk analysis is to determine what could happen and why. To complete the risk analysis step, the PI identifies the potential consequences that could result if the hazard was not addressed. The PI also identifies the factors that are causing or contributing to the hazard’s occurrence. The risk factors identify what must be fixed or controlled in order to reduce the level of risk.

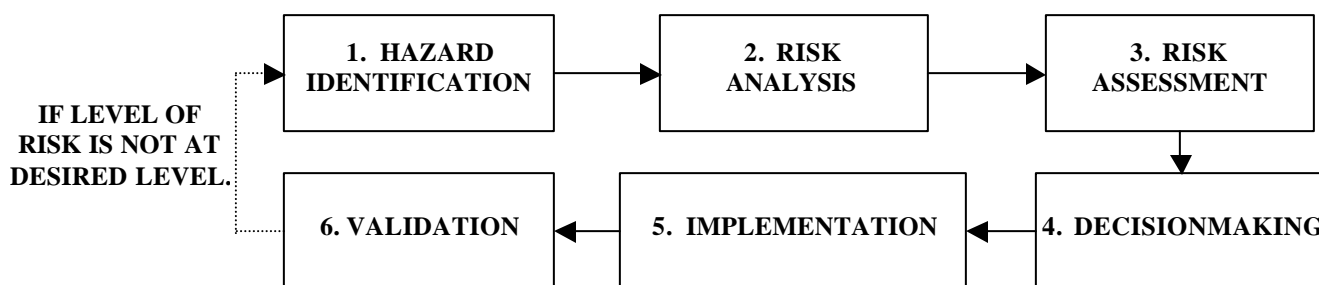
C. Step 3. Risk Assessment. Risk assessment answers the question, “How likely is it to happen and how bad would it be if it did happen?” That is, what is the level of risk? To complete the risk assessment step, the PI uses the information from the risk analysis to determine the severity of the potential consequence, the likelihood of that consequence occurring if the hazard is left alone, and the overall level of risk. The overall level of risk is one consideration in determining what priority should be placed on ensuring the certificate holder addresses the hazard and its risk factors.

D. Step 4. Decisionmaking. Decisionmaking answers the question, “What’s to be done about it?” To complete the decision-making step, the PI decides if action needs to be taken to eliminate the hazard to reduce the level of risk; if the certificate just needs to be monitored; or, if the responsibility for getting the hazard mitigated needs to be transferred to some other Flight Standards or FAA organization.

E. Step 5. Implementation. Implementation answers the question, “Who will do what, when and how?” To complete the implementation step, the PI identifies actions he/she will need to take to effectively oversee the certificate holder’s mitigation of the hazard. He/she will then carry out these oversight actions.

F. Step 6. Validation. Validation answers the question, “Did it work?” To complete the validation step, the PI reviews the current status of the hazard and verifies that the certificate holder has addressed the risk factors that contributed to or caused the hazard to occur and/or be encountered. The PI also verifies that the level of risk posed by the hazard was reduced. Using this evaluation of the current level of risk, the PI decides whether to close the risk management process for this risk hazard, or whether more implementation actions are required.

G. The RMP is discussed in detail in Figure 4, Risk Management Process Work Instructions. The work instructions for this tool will reside in Order 8300.10.

**FIGURE 2. RISK MANAGEMENT PROCESS****9. AIR CARRIER MAINTENANCE OUTSOURCING.**

A. This system safety based approach identifies specific procedures that enhance air carrier outsourcing oversight. This system is comprised of the current tools available to the air carrier certificate management offices and a new OPT.

FIGURE 2. PROGRAM OVERVIEW—Continued

B. The overall air carrier outsourcing prioritization process involves the following steps, which is also depicted in the Outsource Oversight System flowchart.

(1) Data packages will be generated using current sources for the desired maintenance providers. This includes the results of the RSAT and 3650/5650 for each of the desired vendors. This data is reviewed by the PI prior to completing the OPT.

(2) The OPT is completed for all desired maintenance providers taking into consideration step (1), the expertise of PI, and system design, which includes operating environment, configuration, and design of the air carrier and repair station.

(3) The completed OPT will enable certificate management offices to prioritize outsource surveillance, enabling the FAA to target resources to providers of highest risk.

(4) During the next 12 months, the surveillance programs are completed and this data is fed back into the system.

C. The next subsections provide further detail for steps (1) through (3) above.

10. REPAIR STATION DATA PACKAGE. This is the same data package as mentioned earlier in paragraph 4.

11. OUTSOURCE OVERSIGHT ASSESSMENT TOOL.

A. The OPT is to be used for surveillance planning. This tool will assist the 14 CFR part 121, 121/135 and 135 (10 or more) PI, other assigned inspectors, supervisors, and managers in prioritizing outsource maintenance oversight. As a result of this assessment, the PI will determine the priority of outsource surveillance for the coming year. The OPT is discussed in detail in Figure 3, Outsource Oversight Assessment Tool Work Instructions. The work instructions for this tool will reside in Order 8300.10.

B. The OPT is intended to be developed in two phases. Phase One will be available for fielding at the beginning of FY06, and Phase Two will be available for fielding at the beginning of FY07. The Phase One tool will be a simplified paper version of the tool, which will allow for outsource maintenance prioritization at the local level. The Phase Two tool will be more comprehensive and will be automated during FY06 and will be ready for fielding in FY07.

12. PRIORITIZED OUTSOURCE OVERSIGHT. After completing the OPT, the PI will be able to prioritize desired maintenance providers and target surveillance resources to outsource vendors with highest risk.

13. ADDITIONAL OUTSOURCE ENHANCEMENTS. This workgroup recommends using the following items:

A. Part 145 PIs and the stake holding part 121 CMTs use a team approach to accomplish repair station inspections (reference Order 8300.10, vol. 3, ch. 134).

B. ATOS Elements 1.3.7 (Outsourcing) and 1.3.11 (CASS) be used for all part 121 CMTs and interface with multiple chapters of Order 8300.10, including chapters 64 and 69.

C. Quarterly utilization report created for air carriers include information regarding outsource maintenance. This includes the type of work performed, number of visits to the top 12 leading outsource maintenance providers, and outsource maintenance as a percent of the total maintenance (reference Order 8300.10, vol. 3, ch. 158).

FIGURE 2. PROGRAM OVERVIEW—Continued

D. Enhanced repair station oversight training for part 145, part 135, and part 121 inspectors.

NOTE: Part 135 certificate management offices can create a Risk Management Worksheet (RMW) for issues of high concern. See Figure 4, Risk Management Process Work Instructions for further detailed instruction on the completion of RMW. Part 121 certificate management offices can use the current risk management process available through the Air Transportation Oversight System (ATOS) and the Surveillance and Evaluation Program (SEP) for issues of high concern.

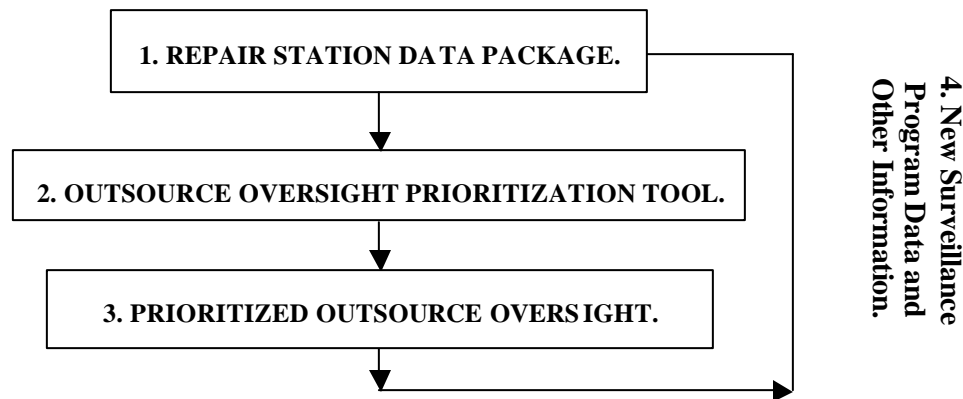


FIGURE 3. OUTSOURCE OVERSIGHT SYSTEM

NOTE: Per 14 CFR part 121, § 121.363(b), an air carrier may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the air carrier of its primary responsibility for all maintenance, preventive maintenance, or alterations performed by itself or another person.

14. INSPECTION RECORDING IMPROVEMENTS.

A. This workgroup has requested the following enhancements to the current PTRS system to improve data reliability. These modifications involve the inclusion of the following information in the PTRS system.

B. PTRS codes 3650/5650 “Required” items should contain the following:

- (1) The 3650/5650 will serve as a repair station facility inspection summary document.
- (2) The 14 required element activity codes will be automatically generated for each required 3650/5650.
- (3) The 14 required element activity codes must be connected to the originating 3650/5650.
- (4) All 14 element activities must be closed prior to closing the 3650/5650.
- (5) A list of all element PTRS codes, description of each element code, overall assessment of each element surveillance, and closing date for each element.
- (6) All element PTRS codes must be hyperlinked from the 3650/5650 to a PTRS data entry for that particular element activity code. Once the PTRS element code is activated, the designator code is generated for the hyperlinked PTRS and a PTRS code is entered on the PTRS form. When any element PTRS is closed, that particular element code is shaded in 3650/5650; even when shaded, the record can be modified by the surveilling inspector.

FIGURE 2. PROGRAM OVERVIEW—Continued

(7) The list of element activities is not limited to 14 activity codes. Other codes can be added as required.

(8) A N/A (not applicable) comment code must be entered into the comment block of the element PTRS to indicate the inspection is not applicable for a specific repair station. N/A can only be used for work away from station, contract maintenance, and air carrier and air carriers requirements.

(9) Transmittal parts 2, 3, and 4 will be inactive when an activity code 3650/5650 has been entered.

C. The following information will be available for all element PTRS codes and will possess the following three pull-down menus. Also, activity codes 3650/5650 will possess only the overall assessment pull-down menu, item (3) below.

(1) Inspectors will use a pull-down menu to describe subelements of concern. The system should allow for more than one to be selected.

(2) Inspectors will use a pull-down menu to describe the particular issue of concern for each of the above subelements selected.

(3) Inspectors can use a pull-down menu with word pictures to assess the particular inspection.

D. Examples of contents of subelement, pull-down menus are shown below.

(1) *Certificate Requirements.*

(a) Air Agency Certificate.

(b) Operations Specifications/Ratings.

(c) Capabilities List.

(d) Geographic Authorization.

(e) Line Maintenance Authorization.

(f) Exemptions.

(2) *Record Systems.*

(a) Personnel Rosters.

(b) Major Repairs/Alterations.

(c) Malfunction/Defect/Service Difficulty Report.

(d) Maintenance Records/Work Orders.

(e) Personnel Records.

(3) *Etc.*

E. Contents of issues of concern pull-down menus are shown below.

(1) Content/information.

FIGURE 2. PROGRAM OVERVIEW—Continued

- (2) Currency.
- (3) Revisions systems.
- (4) Distribution.
- (5) Availability.
- (6) Other.

F. Contents of overall assessment pull-down menus are shown in the table below.

TABLE 2. OVERALL ASSESSMENT PULL-DOWN MENU CONTENTS

Score	Word Picture
1 to 2	The requirements of this element are not met.
3 to 5	The requirements of this element are met and are adequate, appropriate, and maintained. Documentation and controls are deficient.
6 to 7	The requirements for this element are met and are adequate, appropriate, and maintained. An adequate control system is in place, but some discrepancies are noted and being corrected.
8 to 9	The requirements for this element and are adequate, appropriate, maintained, documented, and controlled. No deficiencies observed.
10	The requirements for this element are met and are considered to be well above the minimum industry standards.
N/A	This element is not applicable to this repair station. (Option only applicable for: Work Away from Station, Contract Maintenance, and Air Carrier and Air Operator Requirements.)

**FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL
(OPT) WORK INSTRUCTIONS**

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SECTION 1. INTRODUCTION

1. PURPOSE. The purpose of this document is to provide detailed procedures for the Outsource Oversight Prioritization Tool (OPT). This tool is part of the Enhanced Repair Station and Air Carrier Oversight System.

2. USE. The OPT is used for air carrier outsource surveillance planning. It allows for prioritization among outsource maintenance providers and is recommended to be used during the surveillance planning cycle. This tool will assist the PI, other assigned inspectors, supervisors, and managers in identifying areas of concern or criticality about outsource providers and target resources towards the highest risk outsource maintenance providers.

3. OUTSOURCING OVERSIGHT SURVEILLANCE PROCESS DESCRIPTION.

A. This system safety based approach identifies specific procedures that enhance air carrier outsourcing oversight. This system is comprised of the current tools available to the air carrier certificate management offices and a new OPT.

B. The overall air carrier outsourcing prioritization process involves the following steps, which is also depicted in the Outsource Oversight System flowchart below.

(1) Data packages will be generated using current sources for the desired maintenance providers. This includes the results of the repair station assessment tool (RSAT) and 3650/5650 for each of the desired vendors. This data is reviewed by the PI prior to completing the OPT.

(2) The OPT is completed for all desired maintenance providers, taking into consideration step (1), expertise of PI, and system design, which includes operating environment, configuration, and design of the air carrier and repair station.

(3) The completed OPT will enable certificate management offices to prioritize outsource surveillance, enabling the FAA to target resources to providers of highest risk.

(4) During the next 12 months, the surveillance programs are completed and this data is fed back into the system.

C. The next subsections provide further detail for steps (1) through (3) above.

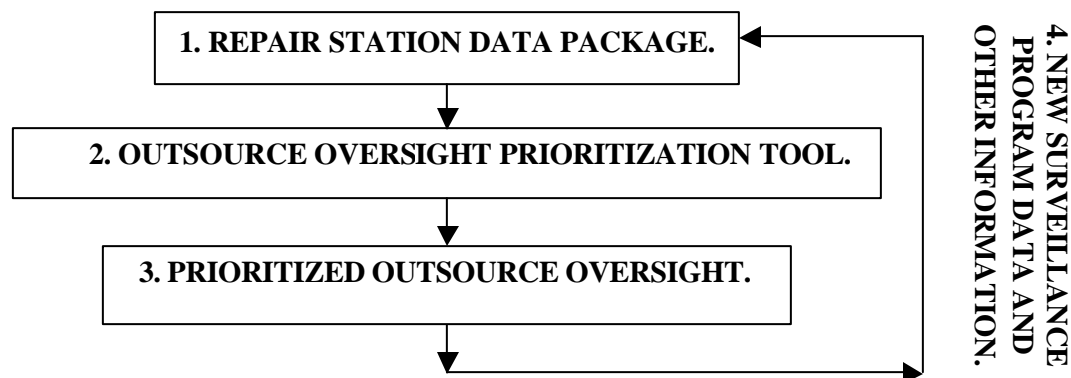


FIGURE 1. OUTSOURCE OVERSIGHT SYSTEM

FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL (OPT) WORK INSTRUCTIONS—Continued

4. REPAIR STATION DATA PACKAGE.

A. This package is accessible to all inspectors via Safety Performance Analysis System (SPAS). This data package provides an analytical review of a repair station. This report contains data available through FAA information resources including, but not limited to, surveillance and enforcement data. Inspectors will use this data package in conjunction with their knowledge of the repair station; system design which includes operating environment, configuration and design of repair station; and personal expertise to complete the OPT.

B. This enhanced data package will be available for fielding at the beginning of FY07. Meanwhile, inspectors should use the Repair Station Profile currently available in SPAS and any other sources, including data available through the certificate holder. It should be noted that currently the data available to the FAA regarding repair stations is very limited.

5. OUTSOURCE OVERSIGHT ASSESSMENT TOOL. The OPT is to be used for surveillance planning. This tool will assist the 14 CFR part 121, 121/135, and 135 (10 or more) PI, other assigned inspectors, supervisors, and managers in prioritizing maintenance provider oversight. As a result of this assessment, the PI will determine the priority of outsource maintenance surveillance for the coming year.

6. PRIORITIZED OUTSOURCE OVERSIGHT. After completing the OPT, the PI will be able to prioritize maintenance providers and target surveillance resources to outsource providers with highest risk.

7. ADDITIONAL OUTSOURCE ENHANCEMENTS. This workgroup recommends the use of the following:

A. Part 145 PIs and the stake holding 14 CFR part 121 CMTs use a team approach to accomplish repair station inspections (reference Order 8300.10, vol. 3, ch. 134).

B. ATOS Elements 1.3.7 (Outsourcing) and 1.3.11 (CASS) be used for all 14 CFR Part 121 CMTs and interface with multiple chapters of Order 8300.10, including chapters 64 and 69.

C. Quarterly utilization report created for air carriers include information regarding outsource maintenance. This includes the type of work performed, number of visits to the top 12 leading outsource maintenance providers, and outsource maintenance as a percent of the total maintenance (reference Order 8300.10, vol. 3, ch. 158).

D. Enhanced repair station oversight training for 14 CFR part 145, part 135, and part 121 inspectors.

NOTE: Per 14 CFR part 121, § 121.363(b), an air carrier may make arrangements with another person for the performance of any maintenance, preventive maintenance, or alterations. However, this does not relieve the air carrier of its primary responsibility for all maintenance, preventive maintenance, or alterations performed by itself or another person.

**FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL
(OPT) WORK INSTRUCTIONS—Continued****SECTION 2. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL—PROCESS DETAIL**

1. PROCEDURES. This section provides step-by-step details on how to complete the OPT. The following work instructions are designed to guide the completion of the OPT by PIs or a designated person.

A. Step 1—Repair Station Data Package. Utilizing SPAS, obtain a Repair Station Data Package for the desired maintenance providers.

NOTE: Since the repair station data package will not be available until Phase Two, use the SPAS Repair Station Profile in the meantime.

B. Step 2—Identify Trends Or Concerns. Perform a comprehensive review of the data package to determine the status of previous risks and to identify new potential issues of concern. Identify trends and concerns, taking into consideration your knowledge of the repair station and system design, which includes operating environment, configuration, and design of the air carrier and repair station. It should be noted that the PI may also contact the certificate holders to obtain any additional pertinent information.

C. Step 3—Complete the OPT. Complete a new OPT taking into consideration step (2). Refer to the OPT on the next page. Notice the lettering below corresponds with lettering in the OPT worksheet.

(a) Create the same number of columns as the number of desired maintenance providers that you want to review.

(b) List the names of desired maintenance providers.

(c) List the designator of the each desired maintenance providers.

(d) Using Word Pictures (shown on page 9-31 by arrow g), assess each of the questions (questions 3 through 20). When assessing each question, consider the Repair Station Data Package and issues identified as a result of that review, the PI knowledge of the repair station, and air carrier and system design which includes operating environment, configuration and design of the air carrier and repair station. It should be noted that the number zero can be used when a question does not apply to the particular provider.

(e) Add all the scores for questions 3 through 20 for each column to obtain the overall score for each maintenance provider listed.

(f) Prioritize surveillance by giving the vendor with the highest overall score the highest priority.

NOTE: Part 135 certificate management offices can create risk management worksheets (RMW) for issues of high concern. See Figure 4, Risk Management Process Work Instructions for further detailed instruction on the completion of RMW. Also, once the PI completes an RMW, the worksheet must be processed and cannot be ignored or dismissed without following the risk management process to completion.

D. Part 121 certificate management offices can use the current risk management process available through ATOS and SEP for issues of high concern.





E. Step 4—Modify the Surveillance Plan. As a result of completing the OPT, the PI may prioritize the outsource surveillance program to reflect the risk level at the air carrier maintenance vendors.

F. Step 5—Completion of the Surveillance Plan. During the next 12 months, the certificate management members will complete the surveillance program.

**FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL
(OPT) WORK INSTRUCTIONS—Continued**

2. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL DEVELOPMENT. The OPT is intended to be developed in two phases. Phase One will be available for fielding at the beginning of FY06; and Phase Two will be available for fielding at the beginning of FY07. The Phase One tool will be a simplified paper version of the tool which will allow for outsource maintenance prioritization at the local level. The Phase Two tool will be more comprehensive and will be automated during FY06 and will be ready for fielding in FY07.

TABLE 1.



OUTSOURCE OVERSIGHT PRIORITIZATION TOOL							
	 a.	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Comment
 b.	1. Maintenance Provider—Name						
 c.	2. Maintenance Provider—Designator						
 d.	3. If this is a new maintenance provider, is that of concern?						
	4. Is adequate air carrier staffing at this provider or adequate air carrier monitoring of this provider of concern?						
	5. Is information in the SPAS Repair Station Data Package of concern?						
	6. Are results of PTRS 3650/5650 of concern?						


**FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL
(OPT) WORK INSTRUCTIONS—Continued****TABLE 1. Continued**

OUTSOURCE OVERSIGHT PRIORITIZATION TOOL						
	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Comment
7. Are ATOS element 1.3.7 significant findings of concern? (14 CFR part 121 certificate holders only)						
8. Are PTRS 3640/5640 significant findings of concern?						
9. Is maintenance provider subcontracting of concern?						
10. Is the air carrier CAS System of concern? (ATOS 1.3.11, PTRS 3635/5635)						
11. Was previous work being performed at this provider of concern?						
12. Is the type/complexity of work performed at this vendor of concern?						
13. Are previous FAA surveillance findings still of concern?						
14. If the last ATOS 1.3.7 EPI for this maintenance provider was conducted more than 1 year prior, is that of concern? (14 CFR Part 121 certificate holders only)						

**FIGURE 3. OUTSOURCE OVERSIGHT PRIORITIZATION TOOL
(OPT) WORK INSTRUCTIONS—Continued**

TABLE 1. Continued

OUTSOURCE OVERSIGHT PRIORITIZATION TOOL						
	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Maintenance Provider	Comment
15. Is change in workforce at the provider such as layoffs, buyouts, rapid-growth of concern?						
16. Are air carrier significant findings of this provider of concern?						
17. Are other air carriers (other than this air carrier) surveillance results of concern?						
18. Are RII qualified personnel of concern?						
19. Is the number of contracted mechanics employed by the maintenance provider of concern?						
20. Is the volume of work performed at the maintenance vendor of concern?						
 e. Overall Score (Total for each column)						
 f. Priority						



Score	Word Picture
0	Issue is of no concern or not applicable
1	Issue is of low concern
2	Issue is of medium concern
3	Issue is of high concern

FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS

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FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS—Continued

SECTION 1. INTRODUCTION

1. PURPOSE. The purpose of this document is to provide detailed procedures for the Risk Management Process (RMP). This process is part of the Enhanced Repair Station and Air Carrier Outsourcing Oversight System.

2. THE RMP is to provide certificate-holding district offices (CHDO) with an effective means to oversee the certificate holder's management of identified hazards and the risk posed by those hazards. This process has six major steps, as illustrated in the Risk Management Process flowchart, and is briefly described below.

A. When to Use the Risk Management Process. The RMP may be used to address any hazard that the PI decides is significant enough to justify intensive analysis and tracking. Systemic hazards are often good candidates for this process. The PI determines when it is appropriate to use the RMP to address an identified hazard.

B. Risk Management Process Description. The paragraphs below briefly describe each of the six steps and how those steps support the RMP. The remainder of this document describes in detail how to carry out each step.

(1) Step 1—Hazard Identification. The purpose of hazard identification is to describe what is wrong with the certificate holder's operation. To complete the hazard identification step, the PI describes the conditions or circumstances in the certificate holder's operating environment or in its operating systems that could lead to an unplanned or undesired event.

(2) Step 2—Risk Analysis. The purpose of risk analysis is to determine what could happen and why. To complete the risk analysis step, the PI identifies the potential consequences that could result if the hazard was not addressed. The PI also identifies the factors that are causing or contributing to the hazard's occurrence. The risk factors identify what must be fixed or controlled in order to reduce the level of risk.

(3) Step 3—Risk Assessment. Risk assessment answers the question, "How likely is it to happen and how bad would it be if it did happen?" That is, what is the level of risk? To complete the risk assessment step, the PI uses the information from the risk analysis to determine the severity of the potential consequence, the likelihood of that consequence occurring if the hazard is left alone, and the overall level of risk. The overall level of risk is one consideration in determining what priority should be placed on ensuring the certificate holder addresses the hazard and its risk factors.

(4) Step 4—Decisionmaking. Decisionmaking answers the question, "What's to be done about it?" To complete the decisionmaking step, the PI decides if action needs to be taken to eliminate the hazard to reduce the level of risk; if the certificate just needs to be monitored, or if the responsibility for getting the hazard mitigated needs to be transferred to some other Flight Standards or FAA organization.

(5) Step 5—Implementation. Implementation answers the question, "Who will do what, when and how?" To complete the implementation step, the PI identifies actions he/she will need to take to effectively oversee the certificate holder's mitigation of the hazard. He/she will then carry out these oversight actions.

(6) Step 6—Validation. Validation answers the question, "Did it work?" To complete the validation step, the PI reviews the current status of the hazard and verifies that the certificate holder has addressed the risk factors that contributed to or caused the hazard to occur and/or be encountered. The PI also verifies that the level of risk posed by the hazard was reduced. Using this evaluation of the current level of risk, the PI decides whether to close the RMP for this risk hazard, or whether more actions are required.

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

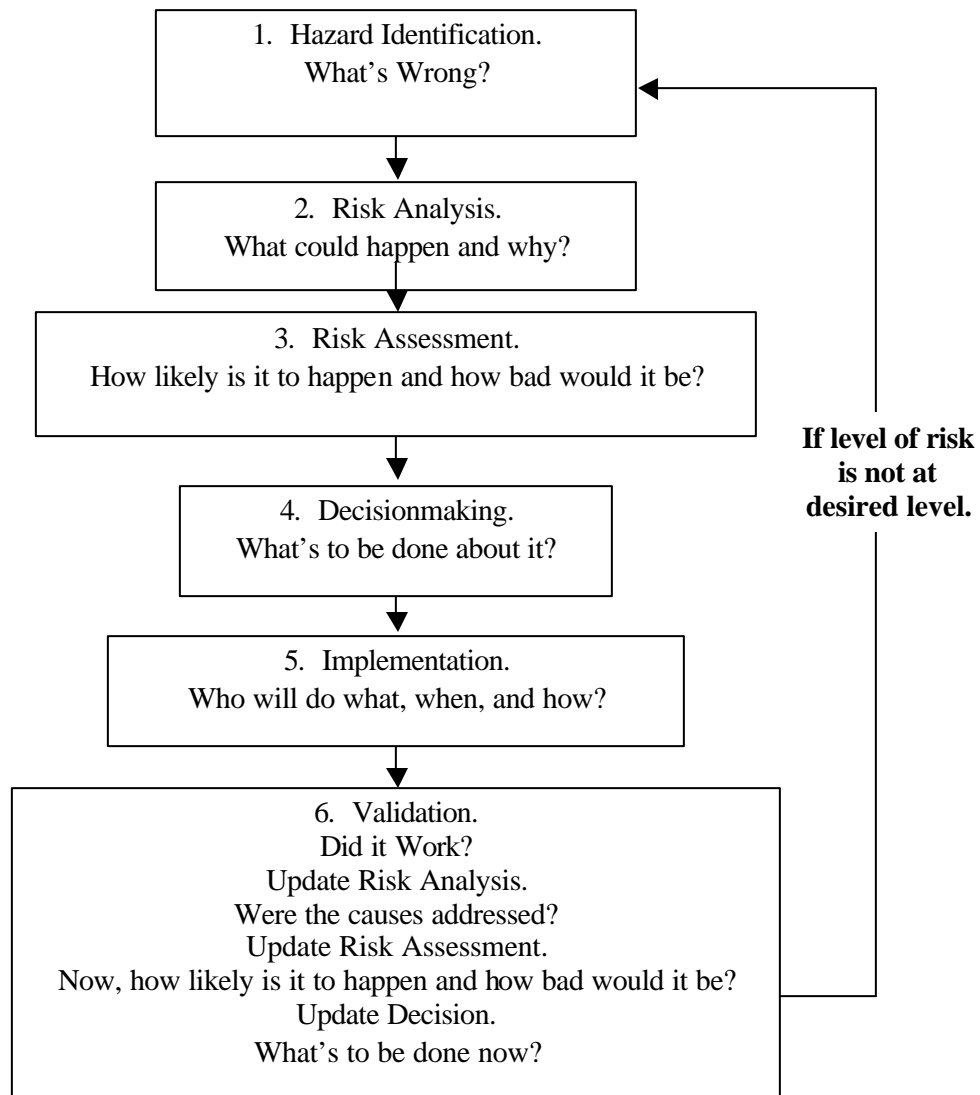


FIGURE 1. RISK MANAGEMENT PROCESS FLOW CHART

FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS—Continued

SECTION 2. RISK MANAGEMENT PROCESS DETAILS

This section provides step-by-step details on how to complete the RMP for any certificate holder. The following work instructions are designed to guide the completion of the blocks of the Risk Management Worksheet (RMW) by PIs or a designated person.

1. HAZARD IDENTIFICATION.

A. Any member of the certificate management team can identify hazards. The emphasis should be on identifying systemic hazards versus isolated findings. Hazards can be identified by reviewing the repair station data package, the repair station assessment tool, PI observations, the performance history and/or other historical data.

B. Once a hazard has been identified, an RMW is opened and the process begins.

NOTE: Before opening a new RMW, check to see if the hazard can be incorporated into another hazard already being addressed.

1.	Certificate Holder Designator			
2.	Designated Person	Name		
		Office	Phone	

Item 1. Repair Station Designator. The designator of the certificate holder that this hazard is associated with.

Item 2. PI or Designated Person. The PI will either complete the RMW or assign the task to a designated person. Enter the following onto the worksheet:

- (a) Name of the person assigned to complete the worksheet.
- (b) Office for that person.
- (c) Phone number of that person.

Section 1: Hazard Identification (What's wrong?)	
3.	Hazard ID
4.	Hazard Description

Item 3. Hazard ID. Follow the local procedures to record a tracking number for the worksheet.

Item 4. Hazard Description. A hazard is defined as a condition or circumstance that could lead to or contribute to an unplanned or undesired event. Write a description of the hazard in a narrative format that includes the relevant facts such as who, what, how often, and where. The descriptive information will be used later to evaluate the effectiveness of action taken to mitigate the risk associated with the hazard.

FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS—Continued

Example: There have been numerous letters of concern identifying tools that were not calibrated or stored in accordance with the repair station's maintenance program procedures. The tools were either being used or were lying around the facilities in various locations instead of being stored with the other tools. This problem has been noted over the past two years.

2. RISK ANALYSIS AND ASSESSMENT.

A. The purpose of risk analysis is to determine, why things are going wrong with the certificate holder's operation, especially its systems. To complete the risk assessment step, certificate management members must identify the potential consequences that could result if the hazard were not addressed and the factors that are causing or contributing to the hazard's occurrence. The risk factors identify what must later be fixed or controlled in order to reduce the level of risk.

B. Risk assessment answers the question, "How bad might it get?" That is, what is the level of risk? To complete the risk assessment step, certificate management members use the information from the risk analysis to determine the overall level of risk.

The overall level of risk is one consideration in determining how much of a priority should be placed on ensuring the certificate holder addresses the hazard and its risk factors.

Section 2: Risk Analysis (What could happen and why?). Risk Assessment (How likely is it to happen and how bad would it be?) (Place ✓ where appropriate).				
5.	Potential Consequence Description			
6.	Risk Factors			
7.	Choose Likelihood Value			
	Frequent	Probable	Occasional	Remote
8.	Choose Severity Value			
	High	Medium	Low	
9.	Overall Risk Assessment Value (Red, Yellow, Blue) from Risk Assessment Matrix			

Item 5. Potential Consequence Description. A potential consequence is defined as an equipment failure, process breakdown, human error, injury/death to persons, damage to equipment, noncompliance with regulations, or nonconformance with procedures. The PI or designated person will describe the maximum credible potential consequence (in other words, the most believable worst case scenario that could occur as a direct result of the hazard).

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

Example of Potential Consequence Description: If the tool calibration and storage issue is not corrected, this could result in many unwanted consequences such as equipment failure, damage to equipment, and injury to persons.

Item 6. Risk Factors. Risk factors are what cause or contribute to the occurrence of the hazard and make the hazard more likely to result in the selected consequence(s). They will be used to help determine the likelihood value in the risk assessment step. In the implementation step, the certificate management team will want to create action items to ensure that the certificate holder has addressed the risk factors.

Example of Risk Factors: Training seems to be the factor that is most contributing to the occurrence of this hazard. The employees do not seem to be completely aware of the maintenance program procedures regarding tool calibration and storage.

Item 7. Choose Likelihood Value. The likelihood value answers the question about how likely it is that the hazard will result in the consequences you identified. It is used with a severity value to provide an overall risk assessment value.

- (a) *Frequent*—Continuously experienced.
- (b) *Probable*—Will occur often.
- (c) *Occasional*—Will occur several times.
- (d) *Remote*—Unlikely, but can reasonably be expected to occur.

Item 8. Choose Severity Value. The severity value reflects how serious the consequence(s) of the risk occurring would be. It is used with likelihood to provide an overall risk assessment value. Use the consequence description you developed to estimate the severity of the risk associated with the hazard.

- (a) *High*—Loss (or breakdown) of an entire system or subsystem; accident, or serious incident.
- (b) *Medium*—Partial breakdown of a repair station's system, violation of regulations or company rules.
- (c) *Low*—Poor repair station performance or disruption to the repair station.

Item 9. Overall Risk Assessment from Risk Assessment Matrix. Select the overall risk value based on the likelihood and severity values chosen in the previous section. Thus, the choice of the risk value in the matrix of likelihood and severity is automatic. The overall risk assessment will be used to guide determinations about the timeframe for beginning the action plan. Generally, lower overall risks will be addressed after higher-level risks.

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

		SEVERITY		
		High	Medium	Low
LIKELIHOOD	Frequent	Red	Red	Yellow
	Probable	Red	Yellow	Yellow
	Occasional	Yellow	Yellow	Blue
	Remote	Yellow	Blue	Blue

3. DECISIONMAKING.

A. Decisionmaking answers the question, “What’s to be done about it?” To complete the decision-making step, certificate management members must decide if action needs to be taken to mitigate the hazard to reduce the level of risk; if the certificate just needs to be monitored, or if the responsibility for getting the hazard mitigated needs to be transferred to some other Flight Standards or FAA organization.

B. *Determining When to Take Action on a Risk.* While this activity in the decision-making step does not appear on the worksheet, the PI must decide how soon each risk must be addressed. A fundamental goal of system safety and risk management is to focus FAA efforts on the critical issues before working the less important issues. This process provides the information needed to do that more effectively. Whether you are creating a new RMW or continuing to process an existing RMW, the more important issues must be addressed by the certificate management office before those of lesser importance. Sequencing of the issues should be based on several factors such as overall risk assessment, the timeliness of required actions, and local, regional, or headquarters priorities.

Section 3: Decisionmaking (What’s to be done about it?)			
10. Selected Approach	Mitigate	Monitor	Transfer
11. Approach Rationale			
12. RMW Closure Rationale & Date (If appropriate)			

FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS—Continued

Item 10. Selected Approach. Select the approach for addressing the risk. Place a check mark in the blocks that correspond to the approach the CHDO will use to deal with this risk. The choices are as follows:

(a) *Mitigate.* Additional action is needed to reduce or eliminate the level of risk.

(b) *Monitor.* The risk level is within normally expected limits and no surveillance is required beyond that normally conducted.

(c) *Transfer.* It is now appropriate to allocate authority, responsibility, and accountability for taking action to another AFS or FAA organization.

Approach	When to Use
Mitigate	Use mitigate as an approach when actions are needed to reduce or eliminate the level of risk: * Mitigation is usually carried out by the certificate holder with CHDO oversight. * Sometimes, the CHDO may use mitigation strategies that do not involve the certificate holder such as reevaluating certificate holder programs approvals, authorizations, deviations and exemptions, or amending or revoking the certificate holder's authority to conduct all or part of an operation, or initiating an enforcement action.
Monitor	Use monitor as an approach when: *The risk level is within normally expected limits, and * No surveillance is required beyond that normally conducted under the NPG.
Transfer	Use transfer as an approach when corrective action for the hazard is beyond the CHDO's authority. In transfer, the CHDO allocates authority, responsibility, and accountability for taking action to another AFS or FAA organization.

Item 11. Approach Rationale. Describe the reasons that the approach identified above was selected.

(a) *Determining whether to proceed to implementation.* Normally, unless the approach is to monitor the level of risk associated with the risk, the decision will be to proceed to implementation (i.e., planning action items and implementing them).

(b) Under certain circumstances it may be appropriate to close the RMW.

Item 12. RMW Closure Rationale and Date. When it is appropriate not to expend any additional resources beyond normal surveillance, then closing the RMW is appropriate.

(a) For example, the approach chosen for this risk is monitor (i.e., the risk has acceptably low risk values), or the responsibility for action on this risk has been totally transferred to another organization and no additional actions need be taken by the CHDO beyond normal surveillance. This may occur after the initial analysis with no action taken or it may occur after completing an action plan.

(b) If it is appropriate to close this RMW at this point, the PI will document that fact by entering the closure rationale and date of the decision in this block.

FIGURE 4. RISK MANAGEMENT PROCESS WORK INSTRUCTIONS—Continued

4. IMPLEMENTATION. Implementation determines who will do what, when and how. To complete the implementation step, certificate management members must identify the actions they need to take to effectively oversee the certificate holder's mitigation of the hazard. They then must carry out these oversight actions.

Section 4: Implementation (Who will do what, when, and how?)			
	#	Action Item	
13.			
15.	Log (Include name of person making entry, date of entry, and activity update)		<div style="text-align: center;"> <div style="border: 1px solid black; padding: 2px; display: inline-block;">14.</div> <div style="display: inline-block; vertical-align: middle;">Status:</div> </div>

Item 13. Action Item Number, Action Item. Based on the approach chosen above, the PI will identify and enter the action items necessary to address the risk factors. The action items should describe what activities the certificate management office will take, or get the repair station to take, to accomplish the desired results, and if desired, the expected completion date for the action. Number each action item sequentially.

Item 14. Status. Periodically update the status of each action item once the plan is approved by selecting from the following list.

- (a) *Requested*—The action item has been identified but not yet begun.
- (b) *In process*—The action item has begun and can continue, but it is not yet complete.
- (c) *Completed*—The action item is completed.

Item 15. Log. The assigned CHDO member completing an action item will enter the ongoing status of the action in the log. These entries should include:

- (a) Name of the person making the entry.
- (b) Date of the entry.
- (c) Activity update that describes the activity and/or results (e.g., meeting held to inform repair station of the risk, and the repair station agreed to update the manual).
- (d) When the action item is complete, this should also be entered in the log.

The PI or designated person will periodically review the action item log to manage the progress, and determine when all the actions are completed.




**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

Type of Action Item	Comment
Ensuring the repair station is aware of the hazard.	Follow local procedures to notify the certificate holder. Methods might include letters, meetings, etc. In your notification, include whatever information you think is appropriate and will help the certificate holder determine what action to take.
Following up to verify that the certificate holder has addressed the risk factors associated with the hazard.	You may want to wait until the certificate holder responds to your notification before you create the CHDO's followup action items.
Assessing whether the certificate holder's actions have had the intended effect on the hazard and reduced the level of risk.	Collect data to assess how the certificate holder's actions affected the hazard.

5. VALIDATION. Validation answers the question, “Did it work?” To complete the validation step, certificate management members evaluate the current status of the hazard and verify that the certificate holder addressed the risk factors that contributed to or caused the hazard to occur. CHDO members also verify that the level of risk posed by the hazard was reduced. Using this assessment of the current level of risk, certificate management members decide whether to close the risk management process for this risk hazard, or whether more implementation actions are required.

Section 5: Validation (Did it work?) (Place ✓ where appropriate)				
16.	Date			
17.	Were the risk factors addressed?	Yes		No
18.	What additional risk factors need to be addressed?			
Current Likelihood Value				
19.	Frequent	Probable	Occasional	Remote
Current Severity Value				
20.	High	Medium	Low	
21.	Current Overall Risk Assessment Value (Red, Yellow, Blue) from Risk Assessment Matrix			

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

Update Approach			
22. 	Update Approach	Monitor	Mitigate
23. 	Update Approach Rationale		
24. 	RMW Closure Rationale & Date		

Item 16. Date. Date validation was completed.

Item 17. Were the risk factors addressed? Determine if the actions taken have addressed the risk factors identified in step (6).

Item 18. What additional risk factors need to be addressed? Determine if additional risk factors need to be addressed.

Item 19. Current Likelihood Value. Select the current likelihood value.

- (a) *Frequent*—Continuously experienced.
- (b) *Probable*—Will occur often.
- (c) *Occasional*—Will occur several times.
- (d) *Remote*—Unlikely, but can reasonably be expected to occur

Item 20. Current Severity Value. Select the current severity value.

- (a) *High*—Loss (or breakdown) of an entire system or subsystem; accident, or serious incident.
- (b) *Medium*—Partial breakdown of a repair station's system, violation of regulations or company rules.
- (c) *Low*—Poor repair station performance or disruption to the repair station.

Item 21. Overall Risk Assessment from Risk Assessment Matrix. Select the overall risk value based on the current likelihood and severity values chosen in the previous section. This will enable the PI to determine if the actions taken earlier have lowered the overall risk value.

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

		SEVERITY		
		High	Medium	Low
LIKELIHOOD	Frequent	Red	Red	Yellow
	Probable	Red	Yellow	Yellow
	Occasional	Yellow	Yellow	Blue
	Remote	Yellow	Blue	Blue

Item 22. Update Approach. Update the approach for addressing the risk based on the new risk assessment. The choices are as follows:

- (a) *Mitigate.* Additional action is needed to reduce or eliminate the level of risk.
- (b) *Monitor.* The risk level is within normally expected limits and no surveillance is required beyond that normally conducted.
- (c) *Transfer.* It is now appropriate to allocate authority, responsibility, and accountability for taking action to another AFS or FAA organization.

Item 23. Update Approach Rationale. Describe the reasons that the approach identified above was selected.

(a) *Determining Whether to Close RMW.* If as a result of the actions taken the risk level is within normally expected limits and no surveillance is required beyond that normally conducted then the RMW can be closed.

(b) Additionally, if it is discovered during this process that it is now appropriate to allocate authority, responsibility, and accountability for taking action to another AFS or FAA organization then the RMW can also be closed. However, if the actions taken have not lowered the level of risk to an acceptable level, then it might be necessary to continue mitigation till the risk is lowered to a desired level.

Item 24. RMW Closure Rationale and Date. When it is appropriate not to expend any additional resources beyond normal surveillance, then closing the RMW is appropriate. The PI or designated person will document that fact by entering the closure rationale and date of the decision in this block.

Example: The validation reveals that now the manuals are clearly written, the training is adequate, and the tool calibration is being conducted appropriately. This risk now has a “remote” likelihood 4 and a “low” severity 3.

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

RISK MANAGEMENT WORKSHEET

1.	Repair Station Designator				
2.	Designated Person	Name			
Office			Phone		

Section 1: Hazard Identification (What's wrong?)

3.	Hazard ID	
4.	Hazard Description	

Section 2: Risk Analysis (What could happen and why?)

Risk Assessment (How likely is it to happen and how bad would it be?) (Place ✓ where appropriate)

5.	Potential Consequence Description				
6.	Risk Factors				
Choose Likelihood Value					
7.	Frequent	Probable	Occasional	Remote	
Choose Severity Value					
8.	High	Medium	Low		
9.	Overall Risk Assessment Value (Red, Yellow, Blue) from Risk Assessment Matrix				

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued****RISK ASSESSMENT MATRIX**

		SEVERITY		
		High	Medium	Low
LIKELIHOOD	Frequent	Red	Red	Yellow
	Probable	Red	Yellow	Yellow
	Occasional	Yellow	Yellow	Blue
	Remote	Yellow	Blue	Blue

Section 3: Decisionmaking (What's to be done about it?)				
10. →	Selected Approach	Monitor	Mitigate	Transfer
11. →	Approach Rationale			
12. →	RMW Closure Rationale & Date (If appropriate)			

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

Section 4: Implementation (Who will do what, when, and how?)			
Action Item			
13.	#	Action Item	
15.	Log (For each log include name of person making entry, date of entry and activity update)		14. Status:
	Log		Status:
	Log		Status:
	#	Action Item	
	Log		Status:
	Log		Status:
	Log		Status:

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

Section 5: Validation (Did it work?) (Place ✓ where appropriate)				
16.	Date			
17.	Were the risk factors addressed?	Yes		No
18.	What additional risk factors need to be addressed?			
Current Likelihood Value				
19.	Frequent	Probable	Occasional	Remote
20.	Current Severity Value			
	High	Medium	Low	
21.	Current Overall Risk Assessment Value (Red, Yellow, Blue) from Risk Assessment Matrix			
Update Approach				
22.	Update Approach	Monitor	Mitigate	Transfer
23.	Update Approach Rationale			
24.	RMW Closure Rationale & Date			

**FIGURE 4. RISK MANAGEMENT PROCESS
WORK INSTRUCTIONS—Continued**

GLOSSARY OF TERMS

Terms	Definitions
Consequence, Maximum Credible	The most believable, worst case that could occur as a direct result of the hazard.
Consequence, Potential	Potential equipment failure, process breakdown, human error, injury/death to persons, damage to equipment, noncompliance with regulations, or nonconformance with procedures.
Hazard	Condition, event, or circumstance that could lead to or contribute to an unplanned or undesired event.
Mitigate Approach	Additional action is needed to reduce or eliminate the level of risk.
Monitor Approach	The risk level is within normally expected limits and no surveillance is required beyond that normally conducted under the National Program Guidelines (NPG).
Risk	Expression of the impact of an undesired event in terms of event likelihood and event severity.
Risk Analysis	Identification or evaluation of the two components of risk, i.e., undesired event likelihood and severity of occurrence.
Risk Assessment	The process by which the results of risk analysis is used to make decisions.
Risk Factors	Factors are responsible for higher levels of risk, either in terms of likelihood or severity. These factors then become specific targets for risk control, either by eliminating them or reducing their effects.
Risk Likelihood Values	Frequent—Continuously experienced. Probable—Will occur often. Occasional—Will occur several times. Remote—Unlikely, but can reasonably be expected to occur.
Risk Severity Values	High—Loss (or breakdown) of an entire system or subsystem; accident, or serious incident. Medium—Partial breakdown of a repair station's system, violation of regulations or company rules. Low—Poor repair station performance or disruption to the repair station.
Transfer Approach	To allocate authority, responsibility, and accountability for taking action to another AFS or FAA organization.

FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS

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FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS—Continued

SECTION 1. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS

1. INTRODUCTION.

A. The purpose of this document is to provide detailed procedures for the repair station assessment tool (RSAT). This tool is part of the Enhanced Repair Station and Air Carrier Outsourcing Oversight System.

B. the repair station assessment tool is to be used for both surveillance planning and evaluation assessment. this tool will assist the principal inspector (PI), other assigned inspectors, supervisors, and managers in identifying areas of concern or criticality about a specific repair station and target resources for use in the areas of highest risk.

2. REPAIR STATION OVERSIGHT PROCESS DESCRIPTION.

A. This enhanced oversight system provides a comprehensive, standardized, system safety based approach to repair station surveillance. The system is comprised of a baseline surveillance program, a repair station data package, a repair station assessment tool, and a risk management tool.

B. The overall oversight process involves the following steps, as depicted in the flowchart below.

(1) A comprehensive baseline repair station surveillance program.

(2) A data package is generated via SPAS using current sources. This data is reviewed by the PI prior to completing the RSAT.

(3) An RSAT is completed taking into consideration steps (1) and (2), expertise of PI, and system design, which includes operating environment, configuration, and design of repair station.

(4) The surveillance program is modified to reflect the risk level in each element.

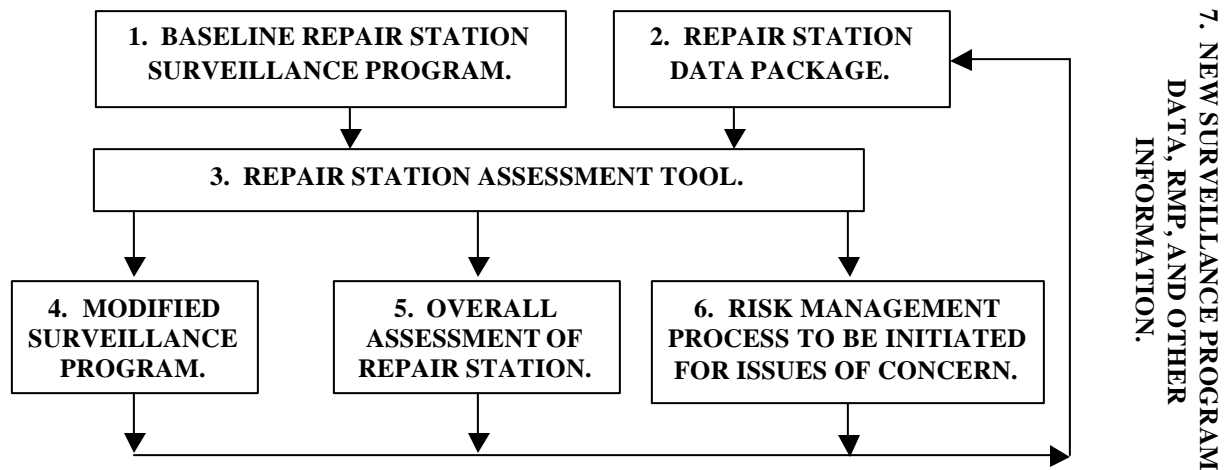
(5) The completed RSAT enables an assessment of the repair station.

(6) A risk management process is to be used for issues of high concern.

(7) During the next 12 months, the updated surveillance program and risk management processes are completed and this data is fed back into the system.

(8) At the beginning of the fiscal year (FY), the process is repeated beginning with step (1) to obtain an overall assessment of the operator and plan surveillance for the upcoming year, enabling the FAA to target resources to areas of highest risk.

(9) The next subsections provide further detail for steps (1) through (6) above.

**FIGURE 5. REPAIR STATION ASSESSMENT TOOL
(RSAT) WORK INSTRUCTIONS—Continued****FIGURE 1. REPAIR STATION OVERSIGHT SYSTEM.**

3. BASELINE REPAIR STATION SURVEILLANCE PROGRAM. The Baseline Surveillance Program is designed to ensure that all aspects of 14 CFR part 145 repair station operations are considered. The new surveillance program divides the current PTRS activity codes 3650/5650 into elements, each assigned with a new 36XX/56XX activity code. This partition better defines the intent of the FAA guidance and provides a more comprehensive surveillance structure. The baseline surveillance program is accomplished by the PTRS activity code 3650/5650 triggering the 14 required activity codes listed below, which constitute a complete facility inspection. All applicable, triggered activity codes must be completed and closed before the 3650/5650 records are closed. Table 1, below, shows all the 14 elements including Order 8300.10, Airworthiness Inspector's Handbook chapters that address each element and the corresponding PTRS activity code.

TABLE 1. 14 ELEMENTS WHICH CONSTITUTE A COMPLETE FACILITY INSPECTION

Volume 3, Chapter 82 (3604/5604) Certificate Requirements	Volume 3, Chapter 90 (3659/5659) Personnel Record
Volume 3, Chapter 83 (3605/5605) Records Systems	Volume 3, Chapter 92 Training (3661/5661) Training
Volume 3, Chapter 84 (3660/5660) Manuals	Volume 3, Chapter 93 (3654/5654) Maintenance Process
Volume 3, Chapter 85 (3657/5657) Housing and Facilities	Volume 3, Chapter 94 (3606/5606) Work Away from Station
Volume 3, Chapter 87 (3656/5656) Technical Data	Volume 3, Chapter 88 (3608/5608) Quality Control
Volume 3, Chapter 86 (3658/5658) Tools and Equipment	Volume 3, Chapter 95 (3663/5363) Contract Maintenance
Volume 3, Chapter 89 (3601/5601) Parts and Materials	Volume 3, Chapter 96 (3618/5618) Air Carrier & Air Operator Requirements

FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS—Continued

4. REPAIR STATION DATA PACKAGE.

A. This package accessible to all inspectors via Safety Performance Analysis System (SPAS). This data package provides an analytical review of a repair station. This report contains data available through FAA information resources, including, but not limited to, surveillance and enforcement data. Inspectors will use this data package in conjunction with their knowledge of the repair station; system design which includes operating environment, configuration and design of repair station; and personal expertise to complete the RSAT.

B. This enhanced data package will be available for fielding at the beginning of FY07. Meanwhile, inspectors should use the repair station profile currently available in SPAS and any other sources including data available through the certificate holder. It should be noted that currently the data available to the FAA regarding repair stations is very limited.

5. REPAIR STATION ASSESSMENT TOOL. The RSAT is used for both surveillance planning and evaluation assessment. This tool will assist the PI, other assigned inspectors, supervisors, and managers in identifying areas of concern or criticality about a specific repair station. As a result of this assessment the PI may modify the baseline surveillance program, begin a risk management process for issues of concern, or both. Additionally, the RSAT will provide an overall assessment of the repair station, which can be used for prioritization among repair stations.

6. MODIFIED SURVEILLANCE PROGRAM.

A. As mentioned previously, the baseline surveillance program consists of one required PTRS activity code 3650/5650 for each repair station. This in-turn will generate 14 additional “R” items as listed in paragraph 5. The 3650/5650 can’t be closed until all these elements are completed and closed.

B. After completing the RSAT, the PI may modify the baseline surveillance program to reflect the risks. In such case, the PI may modify the upcoming fiscal year surveillance plan by assigning additional “P” items as necessary. It should be noted that each repair station must complete at least one “R” item for each element annually.

7. OVERALL ASSESSMENT OF REPAIR STATION. After completing the element assessments in the RSAT, the PI provides an overall assessment of the repair station. This overall assessment will allow for prioritization among repair stations.

8. RISK MANAGEMENT PROCESS. After completing the RSAT, the PI may use Risk Management Process for issues of high concern. This process is designed to provide certificate management personnel an effective means to oversee the certificate holder’s management of identified hazards. The PI may use the Risk Management Process to address any hazard that he/she decides is significant enough to justify intensive analysis and tracking. Systemic hazards are often good candidates for this process. The PI determines when it is appropriate to use the Risk Management Process to address an identified hazard. The Risk Management Process Work Instructions document provides further detail.

9. WHEN TO USE THE REPAIR STATION ASSESSMENT TOOL. The RSAT shall be used at the beginning of the fiscal year to develop the initial work program. An RSAT shall be completed for each repair station every 12 months. In addition, the RSAT may be used at any other time to determine if any modifications to the work program are necessary.

FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS—Continued

SECTION 2. REPAIR STATION ASSESSMENT TOOL PROCESS DETAILS

This section provides step-by-step details on how to complete the RSAT. The following work instructions are designed to guide the completion of the blocks of the RSAT by PIs or a designated person.

1. STEP 1—REPAIR STATION DATA PACKAGE. Utilizing SPAS, obtain a Repair Station Data Package for the repair station in question. Note that since the repair station data package will not be available until Phase Two; use the SPAS Repair Station Profile in the meantime.

2. STEP 2—IDENTIFY TRENDS OR CONCERNS. Perform a comprehensive review of the above data package to determine the status of previous risks and to identify new potential issues of concern. Identify trends and concerns, taking into consideration your knowledge of the repair station and system design, which includes operating environment, configuration and design of the repair station. It should be noted that the PI may also contact the certificate holder to obtain any additional pertinent information.

3. STEP 3—COMPLETE THE RSAT. Complete a new RSAT taking into consideration step 2. Refer to the RSAT on the next page. Notice the lettering below corresponds with lettering in the RSAT.

Item A. This tool is comprised of 14 elements that constitute a complete facility inspection. This column lists the PTRS activity code for each of these 14 elements.

Item B. Short description of each of the 14 elements.

Item C. Number of element inspections required for the FY. One required “R” item inspection is required for each repair station as determined by the repair station baseline program.

Item D. Using Figure 2, Element Assessment Word Pictures (see page 54, arrow I), assess each of the elements. When assessing each element, consider the repair station data package (refer to step 1) and issues identified as a result of that review, the PI knowledge of the repair station and system design which includes operating environment, configuration and design of the repair station. It should be noted that the following three elements may not be applicable to all certificate holders. 3606/5606 Work Away from Station, 3663/5363 Contract Maintenance, and 3618/5618 Air Carrier requirements. As such, a not applicable (N/A) is placed for these items in the element assessment column.

Item E. As a result of the assessment above the PI may elect to modify the surveillance plan by adding additional inspections. These inspections will be only be “Planned” items. Note higher number of “P” items should be planned for elements of concern.

Item F. The number for Total Surveillance is obtained by adding the Number of Inspections Required (step 5C) and Add Surveillance (step 5E). This represents the total number of surveillance for each of the elements.

NOTE: A higher number of total inspections should be planned for elements of concern.

Item G. For issues of high concern, a RMW can be created. If an RMW is to be created, the PI will write “Yes” in this column. See Figure 4, Risk Management Process Work Instructions for further detailed instruction on the completion of RMW.

NOTE: Once the PI completes a RMW, the worksheet must be processed and cannot be ignored or dismissed without following the risk management process to completion.

FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS—Continued

Item H. The final step involves the PI assigning an overall assessment of the repair station by using Figure 3, Overall Assessment Word Pictures (see page 54, arrow J). When assessing the repair station, consider the repair station data package (refer to step 1), the individual element assessments, and system design which includes operating environment, configuration, and design of the repair station.

NOTE: The results of the element and overall assessments will be valuable during the next iteration of RSAT and for prioritization among repair stations.

FIGURE 1. REPAIR STATION ASSESSMENT TOOL

<div> <div>A</div> <div>B</div> </div> <div>ELEMENT</div>		<div>C</div> <div>Number of Inspections Required</div>	<div>D</div> <div>Element Assessment (Select 1 to 10)</div>	<div>E</div> <div>Add Surveillance ("P" Items)</div>	<div>F</div> <div>Total Surveillance</div>	<div>G</div> <div>Create RMW (Yes or No)</div>
PTRS Code	Description					
3604/5604	Certificate Requirements	1				
3605/5605	Records Systems	1				
3660 /5660	Manuals	1				
3657/5657	Housing and Facilities	1				
3656/5656	Technical Data	1				
3658/5658	Tools and Equipment	1				
3601/ 5601	Parts and Materials	1				
3659 /5659	Personnel Record	1				
3661/5661	Training	1				
3654/5654	Maintenance Process	1				
3606/5606	Work Away from Station*	1				
3608/5608	Quality Control	1				
3663/5663	Contract Maintenance*	1				
3618/5618	Air Carrier Requirements*	1				
<div>H</div>	Overall Assessment of this Repair Station					

NOTE: * Only these elements may be marked N/A if appropriate.

**FIGURE 5. REPAIR STATION ASSESSMENT TOOL
(RSAT) WORK INSTRUCTIONS—Continued****FIGURE 2. ELEMENT ASSESSMENT WORD PICTURES**



 Score	Word Picture
1 to 2	It appears that the certificate holder is not meeting the requirements of this element. Documentation and controls seem to be missing.
3 to 5	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, and maintained. Documentation and controls seem to be deficient.
6 to 7	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, and maintained. An adequate control system seems to be in place but some discrepancies were noted and corrected.
8 to 9	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, maintained, documented, and controlled. No deficiencies were observed.
10	It appears that the certificate holder is meeting the requirements for this element and seems to be well above the minimum industry standards.
N/A	This element is not applicable to this repair station. (See note below Figure 1.)

FIGURE 3. OVERALL ASSESSMENT WORD PICTURES

 Score	WORD PICTURE
1 to 2	There appears to be little or no evidence of a credible process being in place and/or facilities seem to be inadequate.
3 to 5	It appears that the processes and facilities are adequate, appropriate, and maintained. Documentation and controls seem to be deficient.
6 to 7	It appears that the processes and facilities are adequate, appropriate, and well maintained. An adequate control system seems to be in place but some discrepancies were noted and corrected.
8 to 9	It appears that the processes and facilities are adequate, appropriate, well maintained, documented, and controlled. No deficiencies were observed.
10	It appears that the processes and facilities are well above the minimum industry standards.

**FIGURE 5. REPAIR STATION ASSESSMENT TOOL
(RSAT) WORK INSTRUCTIONS—Continued**

4. STEP 4—MODIFY THE SURVEILLANCE PLAN. As a result of completing the RSAT, the PI may modify the baseline surveillance program to reflect the risk level at this particular repair station. In such case, the upcoming fiscal year surveillance plan is modified and additional “P” items are assigned as necessary. It should be noted that each repair station must complete at least one “R” item for each element annually.

5. STEP 5—COMPLETION OF THE SURVEILLANCE PLAN. During the next 12 months, the certificate management members will complete the surveillance program as determined by the RSAT. It should be noted that the baseline surveillance program consists of a 3650/5650 “R” item generated for each repair station. This in turn will generate 14 additional “R” items as listed in paragraph 3 and the 3650/5650 can’t be closed until all these elements are completed and closed.

FIGURE 5. REPAIR STATION ASSESSMENT TOOL (RSAT) WORK INSTRUCTIONS—Continued

SECTION 3. REPAIR STATION ASSESSMENT TOOL DEVELOPMENT

The RSAT is intended to be developed in two phases: Phase One, available for fielding at the beginning of FY06; and Phase Two, available for fielding at the beginning of FY07. The Phase One tool will be a simplified paper version of the tool, which will allow for repair station assessment and prioritization among repair stations at the local level. The Phase Two tool will be more comprehensive and will be automated during FY06 and will be ready for fielding in FY07. These tools will allow for data sharing at a regional and national level.

FIGURE 1. REPAIR STATION ASSESSMENT TOOL—WORKSHEET

Element		Number of Inspections Required	Element Assessment (Select 1 to 10)	Add Surveillance ("P" Items)	Total Surveillance	Create RMW (Yes or No)
PTRS Code	Description					
3604/5604	Certificate Requirements	1				
3605/5605	Records Systems	1				
3660/5660	Manuals	1				
3657/5657	Housing and Facilities	1				
3656/5656	Technical Data	1				
3658/5658	Tools and Equipment	1				
3601/ 5601	Parts and Materials	1				
3659 /5659	Personnel Record	1				
3661/5661	Training	1				
3654/5654	Maintenance Process	1				
3606/5606	Work Away from Station*	1				
3608/5608	Quality Control	1				
3663/5663	Contract Maintenance*	1				
3618/5618	Air Carrier Requirements*	1				
	Overall Assessment of this Repair Station					

NOTE: * Only these elements may be marked N/A if appropriate.

**FIGURE 5. REPAIR STATION ASSESSMENT TOOL
(RSAT) WORK INSTRUCTIONS—Continued**

FIGURE 2. ELEMENT ASSESSMENT WORD PICTURES

Score	Word Picture
1 to 2	It appears that the certificate holder is not meeting the requirements of this element. Documentation and controls seem to be missing.
3 to 5	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, and maintained. Documentation and controls seem to be deficient.
6 to 7	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, and maintained. An adequate control system seems to be in place but some discrepancies were noted and corrected.
8 to 9	It appears that the certificate holder is meeting the requirements for this element and are adequate, appropriate, maintained, documented, and controlled. No deficiencies were observed.
10	It appears that the certificate holder is meeting the requirements for this element and seems to be well above the minimum industry standards.
N/A	This element is not applicable to this repair station. (See note below Figure 1.)

FIGURE 3. OVERALL ASSESSMENT WORD PICTURES

Score	Word Picture
1 to 2	There appears to be little or no evidence of a credible process being in place and/or facilities seem to be inadequate.
3 to 5	It appears that the processes and facilities are adequate, appropriate, and maintained. Documentation and controls seem to be deficient.
6 to 7	It appears that the processes and facilities are adequate, appropriate, and well maintained. An adequate control system seems to be in place but some discrepancies were noted and corrected.
8 to 9	It appears that the processes and facilities are adequate, appropriate, well maintained, documented, and controlled. No deficiencies were observed.
10	It appears that the processes and facilities are well above the minimum industry standards.

**FIGURE 5. REPAIR STATION ASSESSMENT TOOL
(RSAT) WORK INSTRUCTIONS—Continued****GLOSSARY OF TERMS**

Term	Definition
Baseline Surveillance Plan	The baseline surveillance program is accomplished by the PTRS activity code 3650/5650 triggering the 14 required element activity codes, which constitutes a complete facility inspection.
Controls	The certificate holder has checks and restraints in place to ensure a desired result.
Documentation	Includes certificate holder documents such as manuals, policies and procedures.
Element Assessment	Word pictures which allow for the assessment each of the 14 elements that make up a constitute facility inspection.
Overall Assessment	Word pictures which allow for the an overall assessment of the repair station as a result of the RSAT.
Repair Station Data Package	This is a data package accessible to all inspectors via Safety Performance Analysis System (SPAS) available in Phase Two. Utilize Repair Station Profile currently available in SPAS till FY07.
System Design	Includes operating environment, configuration (includes number of employees, facilities, etc.) and design (includes type of maintenance performed, ratings, etc.) of the repair station.